



3505 HUTCHINSON ROAD CUMMING, GA 30040-5860, USA

# **ATLAS<sup>TM</sup> INDUSTRIAL FLAT PANEL PC MONITOR QUICK INSTALLATION GUIDE**



# **Atlas Industrial Monitor**

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NOTE: SEE THE HARDWARE USER'S GUIDE, ATM-USER, LOCATED IN THE DOCUMENTATION AREA OF THE AUTOMATION DIRECT.COM WEBSITE.

# 1. Verify Contents of the Box:

- Atlas Flat Panel Monitor (A "T" at the end of the part number designates the touch screen option.)
- VGA video cable 10' length
- RS-232 Serial touch screen cable (touch screen models only) 10' length
- USB touch screen cable (touch screen models only) 10' length
- Mounting clips and screws (qty of 14)
- USB retention bracket and mounting screw (touch screen models only)
- Optional power plug protective cover

# **Contents:**



### **Power Wiring:**

The Atlas monitor is a high performance color TFT flat panel monitor specifically designed for harsh industrial environments including Class I Division 2, Class II Division 2 and Class III Hazardous Locations. The Atlas monitor accepts standard analog VGA input or digital DVI input, and can display all VESA video modes up to 1280 x 1024 at 75 Hz with 16 million colors. An optional 5-wire analog touch screen is available that offers both RS-232 and USB interface capability. The monitor is housed in a heavy duty steel chassis with a powder coated machined aluminum bezel. The monitor is certified to NEMA 4/4X/12 standards, is UL/CUL listed, meets CE requirements and is RoHS compliant. Panel mounting is simplified using convenient mounting clips instead of conventional studs. All monitors are shipped with a power input wiring receptacle, 10' VGA cable, 10' RS-232 cable (touch panel models only), 10' USB Cable (touch panel models only) and mounting hardware.

### **Dimensions:**



Model	A	В	C	D	E	F
ATM1500 / ATM1500T	12.80"	15.80"	2.65"	3.95"	1.17"	2.40"
	(325.1 mm)	(401.3 mm)	(67.3 mm)	(100.3 mm)	(29.8 mm)	(61.0 mm)
ATM1700 / ATM1700T	14.48"	17.14"	2.85"	5.00"	1.32"	2.60"
	(367.8 mm)	(435.4 mm)	(72.4 mm)	(127 mm)	(33.5 mm)	(66.0 mm)
ATM1900 / ATM1900T	15.70"	18.66"	2.95"	6.00"	1.50"	2.70"
	(398.8 mm)	(474.0 mm)	(74.9 mm)	(152.4 mm)	(38.1 mm)	(68.6 mm)

Certifications and Standards					
Name	UL508	ANSI/ISA 12.12.01-2012	CE		
<b>Atlas</b> Flat Panel Monitor	E157382	E200031	EN 55022-1: Class A, EN 61000-3-2: Class A, EN 61000-3-3, EN 61000-6-2, IEC 60950-1	c(UL)us <b>(</b>	

#### 2. Install Monitor through Enclosure Door or Wall:

- The monitor must be installed on a flat surface of a NEMA type 1, 4, 4X or 12 enclosure.
- Use dimensions as shown in the diagram below to provide a rectangular mounting cutout in an approved NEMA 4/12 enclosure's door or wall.
- Mount the monitor through the enclosure cutout, install and tighten (14) mounting clips to a torque of 8.0 inch-pounds as shown in the diagram to the right

#### **Cutout Dimensions:**





WARNING: An operating temperature of 0 to 50 °C (32 to 122 °F) ambient termperature inside the enclosure needs to be maintained for proper operation of the monitor.



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WARNING: Suitable for use in Class 1, Division 2 Groups A, B, C, and D; Class 2 Division 2 Groups F and G, Class III hazardous locations, or non-hazardous locations only.

### 3. Connect DVI or VGA Video Cable between Monitor & PC

• Connect the included 10' VGA video cable from the video connector on the monitor to the video output connector on the host PC being used with the monitor or use a digital DVI cable (sold separately).

 If using a DVI cable, input selection must be changed to DVI by pushing the UP button on the rear of the monitor.

Note: The 15" monitor will product the best image quality if the PC is set for a 1024 x 768 pixels @ either 60, 70 or 75 Hz. video mode.

Note: The 17" and 19" monitors will produce the best image quality if the PC is set for a 1280 x 1024 pixels @ either 60 or 75 Hz. video mode.

#### 4. Connect USB or Serial Cable between Monitor and PC

- Applies to touch screen version only.
- Use either the included 10' RS-232 Serial touch screen cable or the 10' USB touch screen cable from the appropriate connector on the monitor to the appropriate connector on the host computer; do not connect both.
- If using the USB cable, secure the cable using the included USB retention bracket and screw; consult the Hardware User's Guide, ATM-USER.



Note: When using the USB touchscreen connection, the use of the USB retention bracket is required for hazardous locations and highly recommended for nonhazardous locations



# Cable Connections:





WARNING - EXPLOSION HAZARD: Do not connect or disconnect the USB ports unless the power has been switched off or the area is known to be non-hazardous.

AVERTISSEMENT - RISQUE D'EXPLOSION - Ne pas brancher ou débrancher le ports USB á moins que l'alimentation á été coupée ou si la zone n'est pas hazardeuse.

ADVERTENCIA - PELIGRO DE EXPLOSIÓN - No conecte o desconecte los puertos USB a menos que la computadora se encuentre apagada o el área se considere no peligrosa.

WARNUNG - EXPLOSIONSGEFAHR - USB-Ports nur anschließen oder trennen, wenn keine spannung anliegt oder der Bereich nicht explosiongefährdet ist.

Note: To prevent inadvertent disconnection of video and / or serial touchscreen cables, assure that the thumbscrews are sufficiently tight.

# Mounting Clip Installation:

### 5. Connect Power to the Monitor

- Power source needs to be 100 240 VAC, 50/60 Hz.
- See power connection diagram to the right.
- Secure plug retention screws to monitor.
- Power should not be applied until all cables are attached and the monitor is ready to operate.



#### Damage can occur if power is not properly connected.



WARNING - EXPLOSION HAZARD: Do not disconnect equipment while the circuit is live unless the area is known to be free of ignitable concentrations.

# 6. Apply Power to the Monitor & PC

 Press the DISPLAY POWER button on the rear of the monitor to wake the monitor up. Pressing the DISPLAY POWER button again turns off the backlight inverter and puts the monitor in a reduced power state but the touch screen remains active. It is important to note that this switch does not disconnect power from the monitor. Power is always supplied to the internal AC/DC power supply, which in turn continually supplies power to the internal monitor electronics and the optional touch screen controller.

### 7. Install the Appropriate Touch Screen Driver

- The calibration of the touch screen occurs by a calibration utility that installs as part of the touch screen driver installation process.
- Applies to touch screen version only.
- Download the touchscreen driver files from the product page at automationdirect.com
- Install the touch screen drivers for the particular PC operating system being used. Before installing the drivers, please read the Touch Screen Driver Documentation for operating system details.\*
- Reboot the PC and and restart the monitor to activate the driver.



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\*Note: For models with serial numbers before N2220 use the ELO drivers. For models with serial numbers N2220 and higher use the eGalax drivers.

# 8. Verify Video and Touch Screen Functionality

- Verify the monitor's video display by running a familiar program.
- If using the touch screen model, use the touch screen to navigate by running a familiar program.

### 9. Adjust the Monitor OSD Settings as Required

- Press the Select (Auto Adj) control button on the rear of the panel to initiate an automatic configuration of the screen.
- Although normally not needed, the control buttons on the rear of panel can be used to make other adjustments to the screen.
- Consult the Hardware User's Guide, ATM-USER, located in the documentation area of the automationdirect.com website for detailed usage of the OSD settings.

# 10. Installation Complete





WARNING - EXPLOSION HAZARD: Substition of any components may impair suitability for Class 1, Division 2.

# LCD Power Button:





WARNING - Touchscreen is still active while display is off.

ATTENTION – L'écran tactile est toujours actif, méme quand l'afficheur n'est pas alimenté.

ADVERTENCIA – La pantalla táctil sigue activa aún cuando el display esté apagado.

WARNUNG – Touch screen ist immer noch aktiv, während die anzeigefläche ausgeschaltet ist.



WARNING - The monitor does not automatically select a video input mode. The user must press the "UP (VGA/DVI)" button on the rear of the monitor to select either VGA or DVI input. If a "No Video" message appears on the screen, it is also suggested the user try using the "UP (VGA/DVI)" button to select the active video input.



\*Note: Once you have connected your PC and the monitor, selected the video source and powered both units, it is suggested that the "SELECT (AUTO ADJ)" button on the rear of the monitor be pressed to maximize the video settings.

### OSD Settings Main Menu:



### **Accessories & Replacement Parts**

Part Number	Description
ATM-CBL-VGA10	10 ft. 15-pin coaxial VGA cable. Connects any Atlas monitor to a standard VGA card.
ATM-CBL-VGA25	25 ft. 15-pin coaxial VGA cable. Connects any Atlas monitor to a standard VGA card.
ATM-CBL-VGA50	50 ft. 15-pin coaxial VGA cable. Connects any Atlas monitor to a standard VGA card.
ATM-CBL-DV3M	10 ft. (3 meter) DVI (type D) video cable. Connects M1700 and M1900 to a standard DVI-D port. DVI cables provide a higher bandwidth video interface than the VGA cables.
ATM-CBL-10	10 ft. serial communication cable. Connects Atlas monitor to std. 9-pin RS-232 port.
ATM-CBL-25	25 ft. serial communication cable. Connects Atlas monitor to std. 9-pin RS-232 port.
ATM-CBL-50	50 ft. serial communication cable. Connects Atlas monitor to std. 9-pin RS-232 port.
ATM-CBL-AB3	3-ft (0.9 meter) Standard USB 2.0 cable with Standard-A plug to Standard-B plug. Suitable for all USB devices.
ATM-CBL-AB6	6-ft (1.8 meter) Standard USB 2.0 cable with Standard-A plug to Standard-B plug. Suitable for all USB devices.
ATM-CBL-AB10	10-ft (3 meter) Standard USB 2.0 cable with Standard-A plug to Standard-B plug. Suitable for all USB devices.
ATM-CBL-AB15	15-ft (4.6 meter) Standard USB 2.0 cable with Standard-A plug to Standard-B plug. Suitable for all USB devices.
ATM-AC-CON	Replacement Power Wiring Connector for AC Powered Units.
ATM-CLIP	Replacement flat panel mounting clip kit. Package of 16 clips and screws.





**USB-CBL-AB6** 



USB-CBL-AB10

ATM-AC-CON



ATM-CBL-DV3M

ATM-CBL-VGA25



ATM-CLIP

# Additional Help and Support

ATM-CBL-VGA10

ATM-CBL-VGA50

• For product support, specifications, installation, and troubleshooting, a Hardware User's Guide, ATMUSER, is downloadable from the Online Documentation area of the AutomationDirect Web site.



· For additional technical support and questions, call our Technical Support team @ 770-844-4200





# WARNING

**USB-CBL-AB15** 

To minimize the risk of potential safety problems, you should follow all applicable local and national codes that regulate the installation and operation of your equipment. These codes vary from area to area and it is your responsibility to determine which codes should be followed, and to verify that the equipment, installation, and operation are in compliance with the latest revision of these codes.

Equipment damage or serious injury to personnel can result from the failure to follow all applicable codes and standards. We do not guarantee the products described in this publication are suitable for your particular application, nor do we assume any responsibility for your product design, installation, or operation.

If you have any questions concerning the installation or operation of this equipment, or if you need additional information, please call Technical Support at 770-844-4200.

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